

IN THE CLAIMS

1 (Currently Amended). A method comprising:
inserting a heat transfer fin into a dovetail shaped opening in a substrate; and
crimping said substrate to secure said fin in said dovetail shaped opening.
~~forming a heat transfer fin of a laminate of a metallic and a non-metallic layer, said~~
~~metallic layer providing structural integrity to the laminated fin.~~

Claim 2 (Canceled).

3 (Currently Amended). The method of claim 1 including ~~permanently securing said~~
~~fin to a heat conductive base using crimping~~ forming said fin of a laminate of metallic and non-
metallic layers, said metallic layer providing structural integrity to said laminated fin.

4 (Previously Presented). The method of claim 1 including adhesively bonding said
metallic and non-metallic layers.

5 (Original). The method of claim 1 wherein forming a heat transfer fin includes forming
a fin of a laminate of a metallic and a pyrolytic graphite material.

6 (Original). The method of claim 1 including forming the fin with an aspect ratio higher
than 20:1.

7 (Original). The method of claim 5 including forming the fin with an aspect ratio of
60:1.

8 (Original). The method of claim 1 including securing heat transfer fin to an integrated
circuit.

9 (Original). The method of claim 8 including securing said heat transfer fin to a
microprocessor.

10 (Original). The method of claim 2 including forming the metallic and non-metallic material of equal thicknesses.

11 (Currently Amended). A heat sink comprising:
a heat sink fin ~~including metallic and non-metallic materials, said metallic material providing structural integrity to said fin~~ having a dovetail shaped lower section; and
a conductive base, said fin secured to said base, said base having a dovetail shaped cavity that conforms to the dovetail shaped lower end of said heat sink fin.

Claim 12 (Canceled).

13 (Currently Amended). The heat sink of claim 11 wherein said fin is ~~crimped to said base~~ formed of metallic and non-metallic materials, said metallic material providing structural integrity to said fin.

14 (Currently Amended). The heat sink of claim ~~11~~ 13 wherein said metallic and non-metallic materials are adhesively bonded.

15 (Currently Amended). The heat sink of claim ~~11~~ 13 wherein said non-metallic material is a pyrolytic graphite material.

16 (Original). The heat sink of claim 11 wherein the fin aspect ratio is higher than 20:1.

17 (Original). The heat sink of claim 16 wherein the fin aspect ratio is 60:1.

18 (Original). The heat sink of claim 11 wherein said base is secured to an integrated circuit.

19 (Original). The heat sink of claim 18 wherein said integrated circuit is a microprocessor.

20 (Original). The heat sink of claim 11, said fin including a first sheet of metallic material and a second sheet of non-metallic material, said sheets being laminated together.

21 (Original). The heat sink of claim 20 wherein said first and second sheets are of equal thicknesses.

22 (Currently Amended). An integrated circuit comprising:
an integrated circuit chip; and
a heat sink secured to said chip, said heat sink including a heat transfer fin and a support, said heat transfer fin having a lower end which is dovetail shaped and said support having a dovetail shaped cavity, said dovetail shaped lower end of said fin being held in said dovetail shaped cavity. ~~of a laminate of metallic and non-metallic material, said metallic material providing structural integrity to said fin.~~

23 (Currently Amended). The circuit of claim 22 wherein said ~~heat sink includes a conductive base, and said fin is crimped to said base~~ fin includes a laminated metallic and non-metallic material, said metallic material providing structural integrity to said fin.

24 (Currently Amended). The circuit of claim ~~22~~ 23 wherein said metallic and non-metallic materials are adhesively bonded.

25 (Currently Amended). The circuit of claim ~~22~~ 23 wherein said non-metallic material is a pyrolytic graphite material.

26 (Original). The circuit of claim 22 wherein the fin aspect ratio is higher than 20:1.

27 (Original). The circuit of claim 26 wherein the fin aspect ratio is 60:1.

28 (Previously Presented). The circuit of claim 22 wherein said heat sink includes a base secured to said integrated circuit chip.

29 (Original). The circuit of claim 28 wherein said integrated circuit chip is a microprocessor.

30 (Original). The circuit of claim 22 wherein said metallic and non-metallic material are of equal thicknesses.